Application No.: 10/526,663 2 Docket No.: 416272004600

Response to OA 11/27/07

## **AMENDMENTS TO THE CLAIMS**

## **CLAIMS**

Claims 1-14. (Canceled)

Claim 15. (Currently amended) A method for producing a transformed maize plant

comprising;

(a) inducing a shoot meristem culture by culturing on a meristem proliferation medium

an isolated maize tissue selected from the group consisting of vegetative shoot meristem tissue,

meristem tissue from axillary shoot, stem tissue, or leaf base tissue;

(b) introducing a nucleic acid into at least one cell of the shoot meristem culture;

(c) selecting the transformed cells; and

(d) and growing the transformed cells in a regeneration medium so as to produce a

transformed plant,

wherein the meristem proliferation medium comprises from 0 mg/L to about 3 mg/L of an auxin,

from about 2 mg/L to about 8 mg/L of a cytokinin, from about 10 g/L to about 60 g/L of maltose or

about 10 g/L to about 60 g/L of sucrose; from about 0.1 μM to about 50 μM copper; and from about

30 μM to about 1500 μM greater than about 35 μM zinc.

Claim 16. (Previously presented) The method of claim 15 where the maize is selected from the

group consisting of B73, Ohio 43, Missouri 17, PHJ90, PHR81, PHP02, PHN46, and PHP38,

PHTE4 and PHJ90.

Claim 17. (Canceled)

Claim 18. (Previously presented) The method of claim 15 where the maize is B73.

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Claim 19. (Currently amended) The method of claim 15 wherein the shoot meristematic culture is maintained on MPM-CuMC.

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- Claim 20. (Currently amended) A method for producing a transformed maize plant <u>that is</u> recalcitrant to <u>transformation</u> comprising;
- (a) inducing a shoot meristem culture by culturing on a meristem proliferation medium an isolated maize stem tissue;
  - (b) introducing a nucleic acid into at least one cell of the shoot meristem culture;
  - (c) selecting the transformed cells; and
- (d) and growing the transformed cells in a regeneration medium so as to produce a transformed plant.
- Claim 21. (Canceled)
- Claim 22. (New) The method of claim 15 where the zinc concentration is from about 60  $\mu$ M to about 1500  $\mu$ M.
- Claim 23. (New) The method of claim 15 where the zinc concentration is from about 100  $\mu$ M to about 500  $\mu$ M.